Met Office

October 2011

The averaging period used for the following assessment was 1981-2010.

UK Overview

The month began with a southerly airstream resulting in some exceptionally high temperatures, reaching 25-28 °C widely in England and Wales. Some places in the west and north recorded their highest temperature of the year. The rest of the month saw mostly mild westerly or southerly airstreams. These brought showers or longer spells of rain to the north-west, but areas towards the south-east were drier with further relatively warm days.

The mean temperature was 1.8 °C above the 1981-2010 average, resulting in the warmest October since 2006 and the eighth warmest in the last 100 years. New October maximum temperature records were set on the 1st for England, Wales and the UK overall. There was a marked contrast in rainfall, with amounts ranging from well below average over East Anglia and south-east England to well above in Northern Ireland and western Scotland. It was the wettest Octobers on record over Northern Ireland. Sunshine amounts varied from well below normal over Northern Ireland and western Scotland to well above in East Anglia. It was the dullest October on record over Northern Ireland.

A maximum temperature of 29.9 °C was recorded at Gravesend (Kent) on the 1st, the highest UK temperature on record for October. A minimum temperature of -3.3 °C was recorded at Santon Downham (Suffolk) early on the 20th. In the 24 hours ending at 0900 on the 23rd, 102.4 mm of rainfall was recorded at Alltdearg House, near Sligachan, Isle of Skye. A wind gust of 77 mph was recorded at Killowen (County Down) on the 17th.

Weather Impacts

The month began with a remarkable heat-wave across England and Wales. The 1st was the warmest day of the spell, with temperatures exceeding 25 °C widely and 28-29 °C in central and eastern England. The temperature of 29.9 °C recorded at Gravesend, Kent on the 1st was the highest October temperature on record in the UK, beating 29.4 °C at March, Cambridgeshire on 1st October 1985. The 1st was also the warmest October day on record in Wales, with 28.2 °C at Hawarden Airport, Flintshire. On the 2nd, central and eastern England were again very warm with over 28 °C widely. The 3rd was the last day of the heat-wave, with temperatures again exceeding 27-28 °C in south-east England. During the 3rd and 4th the wind veered towards the west, bringing frontal systems and returning temperatures to more normal autumn values.

In contrast, 60 mm of rainfall in eastern parts of Northern Ireland on the 1st resulted in localised flooding of roads in County Down. On 17th, heavy rain again caused flooding of roads and properties in parts of Northern Ireland, especially Counties Tyrone, Fermanagh and Antrim. Central and southern Scotland were also affected, especially in Ayrshire and across the Central Belt to Edinburgh.

Persistent, and at times heavy, rainfall across south-west England, west Wales and Northern Ireland on 24th resulted in localised flooding of properties and roads. Parts of Cornwall, Pembrokeshire and County Tyrone were the areas worst affected. On 26th, slow-moving heavy rain with thunder and hail led to localised minor flooding on some roads in Hampshire and West Sussex. The 27th saw further persistent rain across Wales and western England.

In contrast to these wet areas, some counties in eastern England were again lacking rain and farmers there were struggling to harvest potato and sugar beet crops in the very dry conditions.

England Diary of Highlights

Westerly or southerly airstreams brought showers or longer spells of rain to the north and west, but areas towards the south and east were drier with several relatively warm days, exceptionally so at the start of the month. The mean temperature was 1.9 °C above the 1981-2010 average, making it the warmest October since 2006 and the seventh warmest in the last 100 years. Rainfall amounts were close to normal across northern England and in Devon and Cornwall. Elsewhere it was a relatively dry month, with most of East Anglia and the south-east recording less than half the normal amount and only about a third in a swathe from Northamptonshire to Sussex. Sunshine amounts were well above normal in the eastern half, but it was duller towards the north-west. East Anglia enjoyed its second sunniest October in a series from 1929.

1st to 3rd:

The first few days saw exceptionally high maximum temperatures in the south. On 1st, 29.9 °C recorded at Gravesend (Kent) set a new UK October record. On 2nd, central and eastern areas were again very warm with maxima over 28 °C widely. The 3rd was the last day of the heat-wave, with temperatures again rising to 27-28 °C in the south-east. In contrast, temperatures in the north-west were around or below normal with outbreaks of rain and occasional gales.

4th to 13th:

An unsettled period with westerly winds and frequent bands of rain or showers and a good deal of cloud. Temperatures remained generally above average. It was often very windy, with a gust of 66 mph recorded at St Bees Head (Cumbria) and gusts to over 40 mph widely on 6th. Generally, north-western areas had the most rain; on 8th 39.8 mm was recorded at Blencathra (Cumbria), on 9th 35.3 mm fell at Malham Tarn (North Yorkshire) and on 11th 32.0 mm was recorded at Bainbridge (North Yorkshire). However, it was drier further south and east with some sunny spells. Each day from 9th to 12th, temperatures rose to around 20 °C across the south-east and East Anglia, with 22.6 °C at Frittenden (Kent) on 9th, 21.2 °C at Mickleham (Surrey) on 10th, 20.7 °C at Manston (Kent) on 11th and 20.7 °C at Cambridge on 12th. On 13th, the warmest weather was over southern England, with a maximum of 20.8 °C at Otterbourne (Hampshire).

14th to 16th:

A brief spell of more settled weather, with plenty of sunshine, but rather cold overnight with an air frost being recorded in several rural locations. Daytime temperatures were still high for the time of year, with 18.7 °C at Chivenor (Devon) on 15th and 19.0 °C at Wallingford (Oxfordshire) on 16th. However 16th also saw cloud beginning to move in from the west, ending the period of fine weather.

17th to 20th:

The settled weather ended abruptly on 17th, when a cold front moved south-eastwards during the evening bringing heavy rain after a largely fine day. The following days saw cool north-westerly winds bearing occasional showers. The showers turned heavier on 19th with some thunder in the north-west, but south-east England stayed largely dry. The first widespread air frost of the autumn occurred early on 20th, with temperatures in many rural areas of eastern and northern England dipping just below freezing and -3.2 °C recorded at Benson (Oxfordshire). Late on 20th however, cloud and rain returned to the north-west.

21st to 31st:

Another unsettled period with westerly winds and often rather cloudy and wet. However periods of clearer and brighter weather resulted in some low overnight temperatures, with air frost in southern and eastern areas on the morning of 21st. The 23rd saw gales on southern and western hills and coasts, but temperatures were again above normal with 20.5 °C at Wellesbourne (Worcestershire). Overnight 23rd/24th into the morning of 24th was very wet in the south-west with 44.0 mm of rain falling at Cardinham (Cornwall) and totals of 40 to

50 mm elsewhere in Cornwall and Devon. The rest of England was dry and sunny, with rain only moving through southern areas in the evening. The 25th saw more heavy rain in northern England, with heavy showers in Cornwall, but drier and sunnier conditions elsewhere. Heavy thundery showers continued overnight into 26th in the far south, with 43.2 mm at Thorney Island (Hampshire). Daytime temperatures slowly rose towards the end of the month with maxima 17.3 °C at Gravesend (Kent) on 29th, 18.6 °C at Pershore (Worcestershire) on 30th and 17.8 °C at Leconfield (East Yorkshire) on 31st. Night minimum temperatures also rose, with minima around 14 °C widely early on 31st.

Wales Diary of Highlights

Westerly or southerly airstreams brought plenty of cloud and some spells of rain, especially to the west, but areas towards the east enjoyed several relatively warm days. The first two days were exceptionally warm. The mean temperature was 1.9 °C above the 1981-2010 average, making it the warmest October since 2006. Rainfall amounts were generally somewhat below normal, especially towards the east. Sunshine amounts were above normal in the south-east, but it was duller than normal towards the west.

1st to 2nd:

High pressure dominated the first few days, bringing plenty of sunshine with very warm conditions. Temperatures rose above 25 °C widely on 1st, when a new Welsh maximum temperature record for October of 28.2 °C was set at Hawarden airport (Flintshire). The 2nd was also warm towards the south-east, with 27.1 °C at Cardiff.

3rd to 12th:

A much more unsettled period with a westerly flow bringing showers and more prolonged rain, interspersed with brighter spells. Temperatures to begin with were still above average for the time of year with Cardiff reaching 17.0 °C on 4th. It was also rather breezy at times, with gusts reaching 40 to 50 mph during 9th.

13th to 16th:

A quieter period of weather with variable cloud bringing a mixture of bright spells and occasional outbreaks of light rain. Temperatures remained generally above average for the time of year, reaching 18.3 °C at Rhyl (Denbighshire) on 15th.

17th to 20th:

The quieter spell of weather was interrupted by an active cold front that crossed Wales late on 17th bringing a short period of very heavy rainfall. The following north-westerly flow brought showers, heavy at times and with thunder.

21st to 31st:

A more unsettled pattern, with bands of rain crossing at times. Winds gradually increased with gales for a time on 23rd. Overnight and into 24th a band of heavy rain over western areas resulted in totals around 60 mm in Pembrokeshire, but much of eastern Wales stayed dry through the day. For the remainder of the period outbreaks of rain were interspersed with brighter conditions. It was a mild end to the month, with minimum temperatures above 14 °C in the south during the last few nights.

Scotland Diary of Highlights

A largely unsettled month with rain or showers and strong winds at times. The mean temperature was 1.6 °C above the 1981-2010 average. Rainfall totals were well above normal towards the south-west, with over 150% of average. Elsewhere, totals were closer to normal but were about 25% below normal in the far north

and in the Northern Isles. In western Scotland, it was the equal fifth wettest October in a series from 1910. It was a dull month, particularly towards the south-west. In western Scotland only about half the normal hours of sunshine were recorded and it was one of the dullest Octobers in a series from 1929.

1st to 11th:

A cloudy and wet day for many areas on 1st with over 20 mm across the Central Belt and the south-west and 35.4 mm at Prestwick (Ayrshire). Much of the country had a wet morning on 2nd, although this cleared south-eastwards later leaving scattered light showers. After a bright start on 3rd a band of rain spread from the north-west, clearing later to leave some blustery showers. The 4th saw some heavy showers affecting the north-west along with some strong winds. The 5th started dry in the east but patchy rain quickly spread from the west to affect central and southern areas. The 6th was a cooler day with frequent showers and strong north-westerly winds with Machrihanish (Argyll and Bute) recording a 66 mph gust. The 7th was a bright and breezy day with scattered showers in the north and west .The 8th was cloudy and wet for most of the day with over 20 mm falling in western areas and a 24-hour total of 62.0 mm at Brodick Castle (Isle of Arran). A wet start for the north-west on 9th, clearing during the morning to leave some showers. Another wet start on 10th, although the rain cleared south-eastwards during the morning to leave only a few showers in the north-west. Rain swept eastwards in the early hours of 11th followed by showers and sunny spells.

12th to 16th:

Frost in some highland glens contrasted with a wet start to 12th further south, the rain clearing during the morning to leave a largely dry day. A foggy start on 13th for the south, clearing to a dry day with sunny spells. The 14th and 15th both started cloudy but fine, before a band of rain spread from the west later on 15th. A much better day on 16th with sunny spells, and only scattered showers affecting the north-west.

17th to 22nd:

The 17th saw most of the country suffering strong winds and heavy rain, with a gust of 68 mph at Dundrennan (Dumfries and Galloway), and 24-hour totals over 25 mm across much of the south - including 46.0 mm at Eskdalemuir (Dumfries and Galloway). The 18th was a cooler day with strong north-west winds and rain for the north and west with the east having scattered showers. A cool day with scattered showers for the northern half on 19th and although there was a dry start on 20th rain spread from the west in the early afternoon. The 21st saw rain affecting western areas for much of the day and on 22nd rain again spread eastwards during the evening with 58.4 mm recorded at Cluanie Inn (Highland) and gale force winds in the north-west.

23rd to 31st:

A dry start to 23rd but patchy rain spread from the south during the morning becoming heavier in the west in the afternoon. The 24th started with patchy rain affecting western areas but this moved away during the morning to leave a bright and breezy day. A band of rain on 25th spread from the west, clearing the north-east in the late afternoon. The 26th saw a brighter day with showers in central and southern areas. Sunshine and scattered showers again on 27th, the driest and brightest weather in the east. A generally dry day on 28th but some heavy showers spread to northern and western areas later. Some heavy showers for most areas on 29th with 38.4 mm falling at Tyndrum (Stirling). Heavy showers again affected western areas on 30th, the east being much brighter. Scattered light showers on 31st before rain spread from the west in the late afternoon.

Northern Ireland Diary of Highlights

A largely unsettled month with rain or showers and strong winds at times. The mean temperature was 1.3 °C above the 1981-2010 average. Rainfall totals were well above normal, with over 150% of average almost everywhere and about twice the normal amount quite widely. It was the wettest October in the series from 1910, just wetter than October 1990. It was a dull month, with little more than half the normal sunshine hours, making it the dullest October in a series from 1929.

1st to 11th:

Cloudy and wet on 1st with some heavy outbreaks of rain, giving totals of 50 to 60 mm in the Belfast area. The 2nd was much drier with sunny spells and only some very light scattered showers. After a bright start on 3rd, rain spread from the west. The 4th saw a cloudy but mainly dry day with only occasional light showers. The 5th was cloudy with rain for most of the day, accompanied by strong winds with a gust of 53 mph at Killowen (County Down). A cooler day on 6th with frequent showers throughout the day, windy once again with a 63 mph gust recorded at Orlock Head (County Down). The 7th again was a mixture of scattered showers and sunny spells in a cool north-westerly wind. Cloudy with rain persisting over many areas on 8th and 9th. A wet start on 10th, with bright spells developing before more rain spread in from the south-west later. This persisted into the morning of 11th before turning showery.

12th to 19th:

Further rain at first on 12th clearing to leave a mainly dry bright day, and continuing dry with some sunshine on 13th. A bright start to the 14th but a band of patchy rain spread from the west during the afternoon. A dull and wet day on 15th for most areas. A generally much brighter day on 16th but showers affected the west in the afternoon. The 17th was a day of strong winds and heavy rain. A gust of 77 mph was recorded at Killowen and over 20 mm of rainfall was recorded widely. A cooler day on 18th with a strong north-westerly wind and frequent showers. The 19th saw the winds ease and the showers become more scattered.

20th to 31st:

A dry start on 20th but rain spread in from the west in the early afternoon. A generally dry but cloudy day on 21st with occasional scattered showers. A cloudy and wet day for most areas on 22nd and although 23rd started dry, rain soon spread from the south with 24-hour totals over 25 mm widely and 40.0 mm at Trassey Slievenaman (County Down). Another dry start on 24th but rain again spread from the south with 24-hour falls of over 30 mm widely and 44.2 mm at Edenfel (County Tyrone). A cloudy day with patchy rain for most areas on 25th but the weather improved on 26th and 27th, which were drier and brighter. The 28th started dry but rain spread from the south-west during the afternoon. A dry start on 29th but a band of rain spread eastwards during the afternoon clearing by evening. A cloudy but drier day on 30th with scattered, light showers affecting the north-west. The 31st was a wet, mild day with heavy rain persisting in many places, slowly clearing from the west later.

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